

In the Specification

[0008] Showerheads with ~~VESPEL~~ inserts are conventionally cleaned by CO₂ blasting. This method is similar to bead blasting, but the beads are substituted with CO₂ ice particles that collide with and remove aluminum fluoride, aluminum chloride, and other contaminants. The effectiveness of this method reduces with holes size, making it difficult or impossible to properly clean showerheads. Carbon dioxide is also used on anodized aluminum holes to remove loose contaminants, but is ineffective at removing aluminum chloride or aluminum fluoride chemically bound to aluminum surfaces.

[0017] System 100 includes a steam source 115 connected to a cleaning fixture 120 via a steam line 125 and a pipe fitting 130. Cleaning fixture 120 ~~include~~ includes a body portion 120A and a component interface 120B. Interface 120B attaches to showerhead 105 using, for example, bolt holes 135 in showerhead 105 using any appropriate hardware. Cleaning fixture 120 optionally includes a conventional pressure-relief valve 135 to prevent excessive pressure from building up between fixture 120 and showerhead 105.

[0024] The above-described cleaning procedures are enhanced, in some embodiments, by presoaking the component to be cleaned in hot (e.g., 180 [[190]] to 200 degrees Fahrenheit) water. Presoaking can be done more quickly in hotter water, so parts can benefit from presoaking at ~~elevated~~ pressures greater than one atmosphere to [[that]] allow presoak temperatures in excess of 212 degrees Fahrenheit. In one embodiment, the presoak solution is de-ionized water that includes from zero to two percent hydrogen peroxide. The presoak solution can be agitated using any number of well-know methods. In some cases, the soaking process may clean the component sufficiently to avoid the need for cleaning processes of the type described in connection with Figures 1 and 2.